ABSTRACT

 $2\mu m$ CO in the Eclipse Spectrum of ϵ Aur

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The $2\mu m$ spectrum of ϵ Aur was observed at high resolution ($\lambda/\Delta\lambda \sim 40000$) with the KPNO 4m telescope and FTS approximately every 100 days during the recent eclipse. CO $\Delta v=2$ lines appeared in the spectrum only after mid-totality. No CO features were present JD 2445478 but weak absorption lines were present on 2445592. The CO strengthened in the spectrum and remained present until at least 2445812. CO was again absent after forth contact when the spectrum was observed on 2445912. The CO appears to originate in a cool ($\sim 10^3$ K), turbulent region. Excitation temperatures, velocities, and column densities will be presented.

¹Operated by the Association of Universities for Research in Astronomy, Inc., under contract with the National Science Foundation.